

Warm Mix Asphalt & Beyond



Southeastern Asphalt
User/Producer
Group Annual
Meeting

Hilton Head, SC.
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Outline

- Update on Warm Mix Asphalt Usage
- Recycled Asphalt Pavement (RAP)
- Recycled Asphalt Shingles (RAS)
- Substitute Binders
- Pave-IR System



Initial Thoughts

- Before we save the planet, let's make sure it meets our specifications.
- Let's make sure it's not detrimental to our roads.
- We can try it, but what's the benefit to TxDOT?



Challenges

- Extra Cost (who is going to pay for it?)
 - Allow or Require
- Generic Specification Development
- Mix Design Impacts
- Unfamiliarity
- Hamburg Wheel Test Requirement
- Long Term Performance

Warm Mix Benefits

- More Durable Pavement
 - Less oxidized + less absorption = better fatigue life
- Better in-place densities
 - Improved fatigue life
 - better bonus for contractor
 - SMA 2.5% increase in bonus for 1% increase in density
- Wider Paving Window
 - Winter Paving
 - Night Paving
- Reduced Emissions, Smoke & Odor
- Direct Energy Savings ~ \$1/ton

Current Status

- WMA is allowed for use at Contractor's option on most HMA projects
- A few districts require WMA by plan note
 - Environmental reasons – non attainment areas
 - Overlays on pavements with rubber crack seal
- Most Contract's have or are in the process of installing a WMA additive system



